

In the Claims:

The current status of all claims is listed below and supersedes all previous lists of claims.

Please cancel claim 7, and amend claims 6, 8-10, 12, 14, and 17-22 as follows.

1-5. (canceled).

6. (currently amended) A process ~~for stabilizing a pyrene actin composition~~ comprising:

- a) concentrating ~~the a~~ pyrene actin composition; and
- b) mixing the concentrated pyrene actin composition with sucrose, ~~suerose and a stabilizing agent, and a reducing agent, thereby generating a second pyrene actin composition.~~

7. (canceled).

8. (currently amended) The process of claim 6, ~~wherein the composition of step b) is rapidly frozen~~ further comprising:

- c) rapidly freezing the second pyrene actin composition.

9. (currently amended) The process of claim 8, ~~wherein said frozen composition is lyophilized~~ further comprising:

- d) lyophilizing the frozen second pyrene actin composition generated in step c.

10. (currently amended) The process of ~~claim 7~~ claim 6 wherein said reducing agent is dithiothreitol.

11. (previously presented) The process of claim 10, wherein the concentration of dithiothreitol is 10 mM.

12. (currently amended) The process of claim 8, wherein ~~said~~ the second pyrene actin composition is rapidly frozen in liquid nitrogen or a dry ice ethanol bath.

13. (previously presented) The process of claim 6, wherein said stabilizing agent is dextran.
14. (currently amended) The process of claim 9, wherein the frozen second pyrene actin composition is lyophilized for 40 hours over a temperature from -40 °C to 30 °C.
15. (previously presented) The process of claim 6, wherein said pyrene actin is concentrated to 0.2 to 40 mg/ml.
16. (previously presented) The process of claim 6, wherein said pyrene actin is concentrated to greater than 10 mg/ml.
17. (currently amended) The process of claim 6 wherein said pyrene actin composition of step a) comprises ATP and CaCl₂.
18. (currently amended) The process of claim 6 wherein said sucrose is present in the second pyrene actin composition in amount of 5% w/v.
19. (currently amended) The process of claim 6 wherein said stabilizing agent is present in the second pyrene actin composition in an amount of 1% w/v.
20. (currently amended) The process of claim 9 further comprising:
a) e) resuspending the lyophilized and frozen second pyrene actin composition of claim 9 in A-buffer a buffer comprising 5 mM Tris pH 8, 0.2 mM CaCl₂, and 0.2 mM ATP, thereby generating a resuspended pyrene actin composition; and
b) f) incubating said resuspended pyrene actin composition on ice.
21. (currently amended) The method of claim 20 wherein said resuspended pyrene actin composition is centrifuged.

22. (currently amended) The method of claim 21 wherein said resuspended pyrene actin composition is centrifuged at 100,000 x g.

23-24. (cancelled).